Serial No. 10/635,723

#### **REMARKS**

In accordance with the foregoing, the specification and claim 1-3, 6-18 and 21-30 have been amended. Claim 4, 5, 19 and 20 has been cancelled without prejudice or disclaimer and features thereof have been incorporated into the amended claims 1 and 16. New claims 33-40 have been added. Support for amendments to claims 1 and 16 can be found at page 26, line 3 – page 27, line 2 of the specification and FIGS. 14 and 15.

Claims 1-3, 6-18, 21-30 and 33-40 are pending and under consideration. Reconsideration is respectfully requested.

### I. REJECTION OF CLAIMS 1-30 UNDER 35 U.S.C. 112:

The claims have been amended to overcome the rejection. Therefore, it is respectfully submitted that the rejection is overcome.

# II. REJECTION OF CLAIMS 1-30 UNDER 35 U.S.C. 102(b) AS BEING ANTICIPATED BY TSUDA ET AL. (U.S. PATENT NO. 6,038,063; HEREINAFTER "TSUDA"):

The present invention as recited in claim 1, for example, comprises an optical transmission system which transports optical signals over an optical transmission line. The optical transmission system comprises an optical transmitter comprising an optical amplifying means amplifies main signals, and an optical amplifying control means starts up said optical amplifying means, waiting a first predetermined time to raise output power of said optical amplifying means up to a desired level, in order to prevent an OSC signal from experiencing abrupt power variations, wherein said optical amplifying control means includes a timer with a predetermined time constant that is enabled when the optical transmission system starts to operate, and said optical amplifying control means starts to raise the output power of said optical amplifying means in a stepwise fashion after said timer has expired.

The optical transmission system as recited in claim 1, for example, further comprises an optical receiver comprising a pump light emitting means produces a pump light for injection to the optic transmission line so as to make the optic transmission line serve as an amplifying medium, and a pump light emitting control means starts up said pump light emitting means, waiting a second predetermined time to raise the pump light to a desired power level, in order to prevent the OSC signal from experiencing abrupt power variations, and said pump light emitting control means starts to raise the pump light in a stepwise fashion after said

timer has expired, whereby said pump light emitting means starts up later than said optical amplifying means. <u>Tsuda</u> fails to disclose the Applicants "optical amplifying control means" and "pump light emitting control means" as recited in amended claim 1, for example.

Instead, <u>Tsuda</u> discloses an optical amplifier including an optical amplifying unit having a gain for wavelength division multiplexed (WDM) signal light obtained by wavelength division multiplexing a plurality of optical signals having different wavelengths and a control means for detecting an output level of the optical amplifying unit and controlling the optical amplifying unit so that the output level becomes constant (see column 2, lines 25-33). That is, in <u>Tsuda</u>, neither the output power of the optical amplifying unit nor the pump light is raised in a stepwise fashion.

Claim 16 has been amended to recite similar features as those of amended claim 1. Therefore, although the above comments are specifically directed to claim 1, it is respectfully submitted that the comments would be helpful in understanding differences of various other rejected claims over the cited reference. Therefore, it is respectfully submitted that the rejection is overcome.

III. REJECTION OF CLAIMS 13, 15, 28 AND 30 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTALBLE OVER TSUDA IN VIEW OF WU ET AL. (U.S. PATENT NO. 6,751,013; HEREINAFTER "<u>WU</u>"):

Claims 13, 15, 28 and 30 depend from independent claims 1 and 16, respectively. Therefore, the comments mentioned above in Section II may be applied here also, where applicable.

### IV. CONCLUSION:

In view of the foregoing amendments and remarks, it is respectfully submitted that each of the claims patentably distinguishes over the prior art, and therefore, defines allowable subject matter. A prompt and favorable reconsideration of the rejection along with an indication of allowability of all pending claims are therefore respectfully requested.

## Serial No. 10/635,723

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 1/19 2006

Deidre M. Davis

Registration No. 52,797

1201 New York Avenue, NW, Suite 700

Washington, D.C. 20005 Telephone: (202) 434-1500 Facsimile: (202) 434-1501